

REMARKS

Amendment A was mailed on February 20, 2004. In that Amendment, Applicant inadvertently indicated that claims 7-17 were pending, when in fact they were cancelled in response to a Restriction Requirement filed August 1, 2003. This paper corrects that inadvertent error. This paper is otherwise identical to Amendment A, and includes all of the remarks included in Amendment A.

Claim 1 has been amended to overcome the outstanding §112 rejection, without narrowing the scope of the claim. Withdrawal is requested.

Claims 1-2 stand rejected under §102 on the basis of Chen et al. (U.S. 5,846,648). Applicant respectfully traverses this rejection because Chen et al. do not disclose (or suggest) the physically separated metallic nucleation sites of amended claim 1.

Chen et al. disclose grains 74, 76 that thickly exist over the substrate 12 to form the structured nucleation layer 14, shown in Fig. 2. Each of the grains 74 is adjacent to the other grains 74, and each of the grains 76 is adjacent to other grains 76. On the other hand, amended claim 1 defines physically separated metallic nucleation sites. These sites are formed on the surface of the substrate so as to be physically separated from each other. An example of the metallic nucleation sites can be recognized in the present specification as the metallic nucleation sites or islands 27 shown in Figs. 2 and 5. Thus, the physically separated metallic nucleation sites of amended claim 1 and the grains 74, 76 of Chen et al. are different. Withdrawal of the rejection of claims 1 is requested.

Applicant traverses the rejection of claim 2 for the same reason, and the following reasons as well. The Examiner seems to assert that the compound of claim 2 corresponds to the Cr-based alloy of Chen et al. See page 3, lines 9 and 10 of the outstanding Office Action. Applicant respectfully disagrees, because a “compound” is distinguished from an “alloy”. A “compound” is something formed by a union of elements or parts, especially a distinct substance formed by chemical union of two or more ingredients in definite proportion by weight. The present invention utilizes a compound such as SiO₂, Al₂O₃, and Si₂N₄. An “alloy” is a substance composed of two or more metals or of a metal and a nonmetal intimately united, usually by being fused together and dissolved in each other when molten. Thus, the Examiner’s analysis is inappropriate. Withdrawal of the rejection of claim 2 is requested for this reason, as well.

Claims 3-6 stand rejected under §103 on the basis of Chen et al. Applicants traverse this rejection for the reasons given with respect to claims 1 and 2, and on the basis of the additional features found in claims 3-6.

For the foregoing reasons, Applicant submits that this Application is now in condition for allowance, which is respectfully requested. The Examiner should contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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March 1, 2004

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